

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005958**Date Inspected:** 10-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai ,China**CWI Name:** Li Yan Hua**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Assembly**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

Segment Repair Yard (North of the paint shop)

Segment 3AE

This QA Inspector performed Magnetic Particle testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (MT) report for this date. The members are identified as the longitudinal diaphragm super assembly welds. The Weld Designations are as follows:

SEG14B-002, 004, 005, 006, 007, 012, 022, 023, 031, 032, 040, 035, 050, 052, 053, 054, 055 and 056.

SEG14C-002, 004, 005, 006, 007, 012, 022, 023, 031, 032, 040, 035, 040, 017, 049, 050, 051, 052, 053 and 054.

This QA Inspector performed Magnetic Particle testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (MT) report for this date. The members are identified as the floor beam super assembly welds. The Weld Designations are as follows:

SSD18A-PP22-030, 031, 032, 033, 056, 057, 058, 119, 120 and 127.

SSD18B-PP22-023, 024, 025, 026, 045, 046, 047, 048, 108 and 109.

SSD17A-PP21-029, 030, 031, 032, 087, 088, 056, 057, 116 and 117.

SSD17-PP21-020, 021, 076, 075, 048, 049, 050 and 051.

SSD16-PP20-020, 021, 048, 049, 050 and 051.

SSD16A-PP20-023, 024, 025, 026, 055, 056, 083, 084, 116, 117 and 124.

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SSD15-PP19-023, 024, 025, 026, 055, 056, 053, 054, 083, 087, 117, 118 and 125.

SSD15A-PP19-023, 024, 025, 026, 055, 056, 053, 054, 083, 084, 116 and 117.

This QA Inspector performed Magnetic Particle testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (MT) report for this date. The members are identified as the deck panel to diaphragm super assembly welds. The Weld Designations are as follows:

DP056-028, 033, 035, 037, 077, 078, 080, 082 and 083.

DP055-041, 044, 047, 046, 085, 086, 091 and 090.

DP054-041, 042, 044, 047, 046, 077, 078, 080, 082 and 083.

DP053-032, 033, 035, 037, 038, 085, 086, 090 and 091.

DP005-053, 054, 056, 059, 058, 026, 027, 029, 032 and 031.

DP006-029, 030, 032, 035, 034, 065, 066, 068, 070 and 071.

DP007-032, 033, 035, 037, 038, 077, 078, 080, 083, and 082.

DP008-026, 027, 029, 031, 032, 053, 054, 056, 058 and 059.

This QA Inspector performed Magnetic Particle testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (MT) report for this date. The members are identified as the corner assembly component welds. The Weld Designations are as follows:

CSD2-PP19.5-051, 052, 053, 054, 055, 073, and 074.

CSD5-PP19-001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 045, and 046.

CSD4-PP20-069, 070, 071, 072, 073, 074, 130, 131, 132, 133, 134, 068, 091 and 092.

CA002-071, 072, 073, 074, 083, 084, 085 and 087.

During random verification Magnetic Particle Testing of corner assembly weld # CSD2-PP19.5-051, CSD2-PP19.5-055, CSD4-PP20-069 and CSD4-PP20-092 Caltrans Quality Assurance (QA) Inspector discovered from 10mm to 40mm long linear indications previously overlooked by ZPMC Quality Control MT Technicians. See incident report for this date.

This QA Inspector performed Ultrasonic testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as the transverse deck stiffeners in way of the cross beam. The Weld Designations are as follows: SEG14E-015, SEG14E-018, SEG14E-038, SEG14E-041, SEG14E-061, SEG14E-064, SEG14E-070 and SEG14E-073.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (15000422372), who represents the Office of Structural Materials for

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your project.

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**Inspected By:** Patterson,Rodney

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer